



# Kentucky Academic Course Code List

Health Science Courses  
without Certification

## Kentucky Academic Course Codes

The Kentucky Department of Education (KDE) initiated a course code project under the direction of Commissioner Pruitt in January 2017. The project ensures Kentucky is providing equitable opportunity and access to research-based student experiences that impact student success.

The results of the project include an alignment of core academic course codes to Kentucky Academic Standards. The standards aligned to the core academic course codes cannot be changed. The alignment serves as a guarantee to students across the Commonwealth that all students have equitable access to Kentucky Academic Standards. The project also provides an alignment to Kentucky's new Accountability System, 703 KAR 5:270, which measures opportunity and access provided to students across Kentucky.

The Kentucky Academic Course Code List contains a listing of course codes and descriptions along with certifications that fit the parameters for given courses. The content listed for a course cannot be changed; however, the grade range and population information listed for each course are not absolute and can vary slightly depending on the needs of the school and teacher certifications. Districts should choose the course that most closely represents the content in a given course. ***The description and content of a course are the determining factors in what should be selected.***

### Contact Information:

- Districts may contact [CourseCodes@education.ky.gov](mailto:CourseCodes@education.ky.gov) with questions pertaining to course codes, course content and course-standards alignment.
- Districts may contact the EPSB Division of Certification at (502) 564-4606 or [dcert@ky.gov](mailto:dcert@ky.gov) with question pertaining to certification.
- Districts may contact KHEAA at (502) 696-7397 or [kees@kheaa.com](mailto:kees@kheaa.com) with questions pertaining to KEES eligibility.

## HOW TO USE THIS DOCUMENT

This document contains a listing of course codes and descriptions along with certifications that fit the parameters for given courses. The grade range listed for each course are not absolute. Please choose the course that most closely represents the content in a given course.

### EXAMPLE

John Q Middle School had 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> grade students taking a Visual Art course. This course would be linked to course number **500711: Visual Art – Comprehensive**, which shows a recommended grade range of 6 – 12.

Schools will link their courses on the Infinite Campus “Course Master” tab OR in the “Course” tab to courses listed in this document.

Schools may have created courses that are very unique in order to meet students’ needs. If a course does not meet the definition or content of one contained in this document, please use course number **909999: School Defined Course**, and define the correct content through the LEAD report.

The course code 909999 should be used in situations where a current course code does not exist and there are no existing Kentucky Academic Standards aligned to the course. Local Boards of Education should approve the use of a district's use of a 909999 course code *before* a district begins utilizing it within Infinite Campus. Please see the [Guiding Principles For Using Course Code 909999](#) for more information.

## CERTIFICATIONS

It is important to note that the certificates listed are the ones that fit *ALL* of the parameters for a specific course; there may be other certificates that can teach it with slightly more restrictive parameters.

Please take note of the following information from *The Kentucky Academic Standards* with regard to middle school courses that are offered for high school credit.

### High School Credit Earned in Middle School

It is expected that most students will earn high school credits during their high school years. However, local school districts may offer high school courses to middle level students if the following criteria are met:

- the content and the rigor of the course are the same as established in the *Kentucky Academic Standards*
- the students demonstrate mastery of the middle level content as specified in the *Kentucky Academic Standards*
- the district has criteria in place to make reasonable determination that the middle level student is capable of success in the high school course
- **the middle level course is taught by teachers with either secondary or middle level certification with appropriate content specialization**

Although middle level courses list the Provisional and Standard Elementary Certificates, Grades 1-8 as allowable under the parameters of these courses, they will not meet the above requirements for courses that are offered for high school credit.

*This document is a guide; therefore the EPSB disclaims any warranties as to the validity of the information in this document. Users of this document are responsible for verifying information received through cross-referencing the official record in the EPSB's Division of Certification. The EPSB shall not be liable to the recipient, or to any third party using this document or information obtained therefrom, for any damages whatsoever arising out of the use of this document.*

# **Health Science**

## **(170000)**

# Health Science - Career Major Electives (170100)

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## 170111 - Principles of Health Science

**Grade Level:** 9 - 12

**Credits:** 1

**Description:** Orientation and foundation for occupations and functions across the health care cluster. Includes broad health care core standards which specify the knowledge and skills that the vast majority of health care workers should have. Prerequisite to additional courses in the Health Science Program.

**Content:** Health Science (CTE)

**Population:** General

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## 170131 - Medical Terminology

**Grade Level:** 9 - 12

**Credits:** 0.5-1

**Description:** An intense study of the medical language used in all health career major areas. Pronunciation, spelling and application rules of medical terminology are included.

**Content:** Health Science (CTE)

**Population:** General

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## 170141 - Emergency Procedures

**Grade Level:** 9 - 12

**Credits:** 0.5-1

**Description:** This course is intended to combine all existing courses in the Health Science Cluster to include foundational emergency skills for all Health Science Career Pathway students. This course will include certifications in: Cardiopulmonary Resuscitation for the Healthcare Provider; AED; bloodborne pathogen; first aid; and emergency care as outlined by an approved first aid/CPR/Bloodborne Pathogen certifying agency as put forth by the American Heart Association, National Safety Council or American Red Cross.

**Content:** Health Science (CTE)

**Population:** General

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## 170167 - Body Structures and Functions

**Grade Level:** 10 - 12

**Credits:** 1

**Description:** This course is designed to provide knowledge of the structure and function of the human body with an emphasis on normalcy. The interactions of all body systems in maintaining homeostasis will promote an understanding of the basic human needs necessary for health maintenance. Academic knowledge from life science core content as it relates to the human body (including anatomy and physiology) are included. Laboratory activities should be a part of the course when appropriate.

**Content:** Health Science (CTE)

**Population:** General

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## 170169 - Medical Math

**Grade Level:** 9 - 12

**Credits:** 0.5-1

**Description:** This course is designed to focus, utilize and build on mathematical skills commonly used in all health occupations. Students will use applied techniques, problem-solving and critical thinking to perform mathematical operations such as computations, ratio and proportion, weights and measurements and conversions. This course is strongly recommended for all Health Science majors. Successful completion of Algebra I is suggested prior to enrolling in this course. This course may meet the requirements for the fourth elective mathematics credit required for graduation with an allied health major.

**Content:** Health Science (CTE)

**Population:** General

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## 170199 - Leadership Dynamics - Health Science

**Grade Level:** 9 - 12

**Credits:** 1/2 - 1

**Description:** This course is designed to assist students with developing skills needed to be successful leaders and responsible members of society. This student will develop personal attributes and social skills. Emphasis will be placed on interpersonal skills, team building, communication, personal development and leadership. This course will include opportunities for students to apply their knowledge.

**Content:** Leadership Dynamics

**Population:** General

# Health Science - Sports Medicine (170300)

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## 170301 - Essentials of Sports Medicine

**Grade Level:** 10 - 12

**Credits:** 1

**Description:** An instructional program that prepares individuals to perform routine sports medicine related services for the physically active, under the training and supervision of an approved licensed athletic trainer. The purpose of this program is to give individuals knowledge and skills to prevent, recognize, and provide basic care for injuries and sudden illness.

**Content:** Health Science (CTE)

**Population:** General

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## 170302 - Applied Sports Medicine

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** An instructional program that emphasizes the prevention, assessment and care for injuries and illness to the physically active including the components of exercise science, anatomy, and principles of safety under the supervision of an approved licensed athletic trainer. Subject matter also includes legal issues, acute care skills, nutrition, human performance, taping and wrapping, therapeutic modalities, and application of sports medicine concepts.

**Content:** Health Science (CTE)

**Population:** General

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## 170322 - Health Care Delivery Management

**Grade Level:** 10 - 12

**Credits:** 1

**Description:** Introduces delivery and management of health care including professionalism, health care roles, health care delivery models, and types of health care coverage. Explores legal/ethical issues.

**Content:** Health Science (CTE)

**Population:** General

# Health Science - Allied Health (170500)

A group of courses for students interested in pursuing a health career that serve as a foundation for further studies in the broad health care field. Courses are aligned with national Health Science Core Standards.

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## 170501 - Allied Health Core Skills

**Grade Level:** 11 - 12

**Credits:** 0.5-1

**Description:** Allied Health Core Skills is designed to provide knowledge, concepts and psychomotor skills necessary for gainful employment as an entry-level health care worker. Assisting students in selecting a career major, classroom instruction and educational objectives are combined with learning experiences and observations and clinical rotations. This course is designed for students not enrolled in the Medicaid Nurse Aide program and who have completed Principles of Health Science and Emergency Procedures.

**Content:** Health Science (CTE)

**Population:** General

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## 170502 - Acute Care Basic Skills

**Grade Level:** 12 - 12

**Credits:** 1-2

**Description:** Introduces students to basic health care skills. Prepares individuals to perform routine nursing-related services to patients in acute care settings under the training and supervision of an approved registered nurse or licensed practical nurse. Certification is available upon successful completion of National Health Career Association (NHA) Patient Care Technician exam. Prepares the student for entry-level health care positions in an acute care setting.

**Content:** Health Science (CTE)

**Population:** General

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## 170550 - Internship: Allied Health

**Grade Level:** 10 - 12

**Credits:** 0.5-1

**Description:** The practicum provides supervised on-the-job work experience related to the students' education objectives. Students participating in the practicum do not receive compensation.

**Content:** Health Science (CTE)

**Population:** General

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## 170552 - Internship: Dental Assistant

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** This internship provides supervised on-the-job work experience related to the students' education objectives in the area of Dental Assisting. Students participating in internship for CTE



courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a trimester/semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (trimester/semester or less).

**Content:** Dental

**Population:** None

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## 170555 - EKG Technician

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** The practicum provides supervised on-the-job work experience related to the students' education objectives in the area of EKG. Students participating in the practicum do not receive compensation.

**Content:** Health Science (CTE)

**Population:** General

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## 170558 - Pharmacy Technician

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** This is an online (computer assisted) or traditional course with a pharmacy internship that prepares students for the National Pharmacy Technician Certification (CPhT). You will gain the skills and knowledge to qualify for entry-level positions in a hospital or retail setting.

**Content:** Health Science (CTE)

**Population:** General

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## 170567 - Medical Laboratory Aide (Phlebotomist)

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** The internship provides supervised on-the-job work experience related to the students' education objectives in the area of Medical Laboratory Aide/Phlebotomist. Students participating in internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a trimester/semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (trimester/semester or less).

**Content:** Health Science (CTE)

**Population:** General

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## 170591 - Special Topics in Allied Health

**Grade Level:** 10 - 12

**Credits:** 0.5-1

**Description:** Special Topics in Allied Health is an expanded course offering the study of current world health-related issues. Topics may vary at the discretion of the instructor. (.5 to 1 credit)

**Content:** Health Science (CTE)

**Population:** General

# Health Science - Pre-Nursing (170600)

An instructional program that prepares students to work as an entry-level nursing assistant upon successful completion of the state Medicaid Nurse Aid program and examination. Additional courses to complete a career major are found under Allied Health career major.

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## 170601 - Co-op (Nursing)

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** Cooperative Education for CTE courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved capstone course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements.

**Content:** Health Science (CTE)

**Population:** General

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## 170610 - Introduction to Nursing and Health Care System

**Grade Level:** 10 - 12

**Credits:** 1

**Description:** Historical overview of current health care including medical economics, ethical and legal parameters, roles and responsibilities of health care team members with an emphasis on reflective nursing practice. Medical terminology, therapeutic communication techniques, concepts of health, health assessment, self-care and basic needs related to activities of daily living (ADL) across the lifespan are explored.

**Content:** Health Science (CTE)

**Population:** General

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## 170611 - Development of Care Giver Role

**Grade Level:** 10 - 12

**Credits:** 1

**Description:** Introduction to nursing and the nursing process as related to client activities of daily living across the life span; opportunity to develop and practice psychomotor skills related to health assessment, promotion, maintenance, and illness prevention.

**Content:** Health Science (CTE)

**Population:** General

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## 170614 - Pharmacological and Other Therapeutic Modalities

**Grade Level:** 10 - 12

**Credits:** 1

**Description:** Introduction to techniques used to administer commonly used drugs; dosage calculations; diagnostic studies and other related medical therapies; legal responsibilities.

**Content:** Health Science (CTE)

**Population:** General

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## 170620 - Advanced Nursing Assistant

**Grade Level:** 10 - 12

**Credits:** 3

**Description:** Provides knowledge and skills for nurse aides to assume the role and responsibility required in a variety of health care settings. The focus is communication, infection control, safety, resident/patient rights, and basic nursing skills. Prepares the student to perform basic nursing skills at an advanced level.

**Content:** Health Science (CTE)

**Population:** General

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## 170622 - Health Care Delivery Management

**Grade Level:** 10 - 12

**Credits:** 1

**Description:** Introduces delivery and management of health care including professionalism, health care roles, health care delivery models, and types of health care coverage. Explores legal/ethical issues.

**Content:** Health Science (CTE)

**Population:** General

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## 170623 - Health Care Communication

**Grade Level:** 10 - 12

**Credits:** 1

**Description:** Introduces communication in the health care field. Focuses on communication between members of the health team, patient, and caregivers through an interdisciplinary approach. Emphasizes diversity, sociocultural influences and teamwork.

**Content:** Health Science (CTE)

**Population:** General

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## 170631 - Medicaid Nurse Aide

**Grade Level:** 11 - 12

**Credits:** 1-2

**Description:** An instructional program that prepares individuals to perform routine nursing-related services to patients in hospitals or long-term care facilities, under the training and supervision of an approved registered nurse or licensed practical nurse. State Registry is available upon successful completion of state written and performance examination. Prior to offering this course, the instructor and health science program must be approved for meeting state requirements set by the Cabinet for Health and Family Services.

**Content:** Medicaid Nurse Aide

**Population:** General

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## 170632 - Health Care Basic Skills with Clinical

**Grade Level:** 11 - 12

**Credits:** 1-2

**Description:** Introduces student to basic healthcare skills. Incorporates American Heart Association CPR. Prepares student for the State Registered Nurse Aide examination. Note: faculty and clinical sites must comply with MNA regulations.

**Content:** Medicaid Nurse Aide

**Population:** General

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## 170640 - Health Science Microbiology/Infection Control

**Grade Level:** 10 - 12

**Credits:** 0.5

**Description:** This course is designed to promote an understanding of the effects of microorganisms on the human body. The study includes standard precautions necessary for health maintenance and infection control. The focus is on reduction of diseases that interfere with basic human needs.

**Content:** Health Science (CTE)

**Population:** General

# Health Science - Biomedical Science (170700)

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## 170701 - Principles of Biomedical Science

**Grade Level:** 9 - 11

**Credits:** 1

**Description:** Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. A theme through the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person's life. Key biological concepts including: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease are embedded in the curriculum. Engineering principles including: the design process, feedback loops, fluid dynamics, and the relationship of structure to function are incorporated in the curriculum where appropriate. The course is designed to provide an overview of all the courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses. NOTE TO SCHOOL - this course requires a District agreement with PLTW. You MUST have a current agreement with PLTW to offer this course.

**Content:** Biomedical Science

**Population:** General

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## 170702 - Human Body Systems

**Grade Level:** 10 - 11

**Credits:** 1

**Description:** Students will engage in the study of the processes, structures, and interactions of the human body systems. Important concepts in the course include: communication, transport of substances, locomotion, metabolic processes, defense, and protection. The central theme is how the body systems work together to maintain homeostasis and good health. The systems will be studied as parts of a whole, working together to keep the amazing human machine functioning at an optimal level. Students will design experiments, investigate the structures and functions of body systems, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Students will work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries. NOTE TO SCHOOL - this course requires a District agreement with PLTW. You MUST have a current agreement with PLTW to offer this course.

**Content:** Biomedical Science

**Population:** General

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## 170703 - Medical Interventions

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** Student projects will investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will study the design and development of various medical interventions including vascular stents, cochlear implants, and prosthetic limbs. They will review the history of organ transplants and gene therapy, and read current scientific literature to be aware of cutting edge developments. Using 3-D imaging software and current scientific research students will design and build a model of a therapeutic protein. NOTE TO SCHOOL - this course requires a District agreement with PLTW. You MUST have a current agreement with PLTW to offer this course.

**Content:** Biomedical Science

**Population:** General

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## 170704 - Biomedical Innovations

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** This capstone course gives student teams the opportunity to work with a mentor, identify a science research topic, conduct research, write a scientific paper, and defend team conclusions and recommendations to a panel of outside reviewers. Each team will have one or more mentors from the scientific and/or medical community guiding their scientific research. This course may be combined with the capstone course from the pre-engineering pathway, allowing students from both pathways to work together to engineer a product that could impact healthcare. NOTE TO SCHOOL - this course requires a District agreement with PLTW. You MUST have a current agreement with PLTW to offer this course.

**Content:** Biomedical Science

**Population:** General

# Health Science - Veterinary Assisting (170800)

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## 170801 - Principles of Veterinary Assisting

**Grade Level:** 9 - 12

**Credits:** 1

**Description:** This is a fundamental course provides a Health Science student with an opportunity to develop and demonstrate knowledge and skills in veterinary assisting. Students are introduced to Animal Behavior & Restraint, Sanitation and Safety as pertains to Veterinary Hospital, and Radiology. Small Animal Nutrition, Canine Breeds, and Zoonotic diseases are covered. This is the first of three courses to prepare students for the NAVTA (National Association of Veterinary Technicians in America) Approved Veterinary Assistant (AVA) certification.

**Content:** Animal Science

**Population:** General

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## 170802 - Veterinary Assisting Skills

**Grade Level:** 10 - 12

**Credits:** 1

**Description:** This skills-based course offers students the ability to master skills involved in veterinary assisting. Skills involving grooming, proper restraining, preliminary physical examination, employability, surgical preparation and assisting, and laboratory techniques are introduced and practiced in the clinical setting. Units in Pharmacology, Small Animal Diseases and Parasitology are also covered along with Feline Breeds. This is the final course to prepare students for the NAVTA (National Association of Veterinary Technicians in America) Approved Veterinary Assistant (AVA) certification. Qualified students will take this examination at the end of this course.

**Content:** Animal Science

**Population:** General

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## 170803 - Advanced Veterinary Assisting Skills

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** This course offers the student the opportunity to expand knowledge of veterinary assisting by discussing the history and domestication of animals, identifying breeds (Equine, Bovine, Porcine), anatomy and physiology/ pharmacology, dentistry, as well as Livestock parasitology and nutrition. The student will continue perfecting their skills in the clinical setting.

**Content:** Animal Science

**Population:** General

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## 170804 - Veterinary Assisting Internship

**Grade Level:** 12 - 12

**Credits:** 1

**Description:** The internship provides supervised on-the-job work experience related to the students' education objectives in the area of veterinary assistant. The student's participating in the internship should have successfully completed the prior courses in the Veterinary Assisting pathway.

**Content:** Health Science (CTE)

**Population:** General



# Health Science - Medical Administrative Assistant (170900)

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## 170920 - Medical Office Procedures

**Grade Level:** 11 - 12

**Credits:** 1

**Description:** Provides a working knowledge of the duties required in a medical office. Includes professional and career responsibilities, interpersonal communication, administrative responsibilities, and financial administration.

**Content:** Health Science (CTE)

**Population:** General

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## 170922 - Internship: Medical Administrative Assistant

**Grade Level:** 12 - 12

**Credits:** 1

**Description:** The internship provides supervised work site experience related to the students education objectives in the area of medical administrative assistant. Students participating in internship for CTE courses provide supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a trimester/semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (trimester/semester or less).

**Content:** Health Science (CTE)

**Population:** General